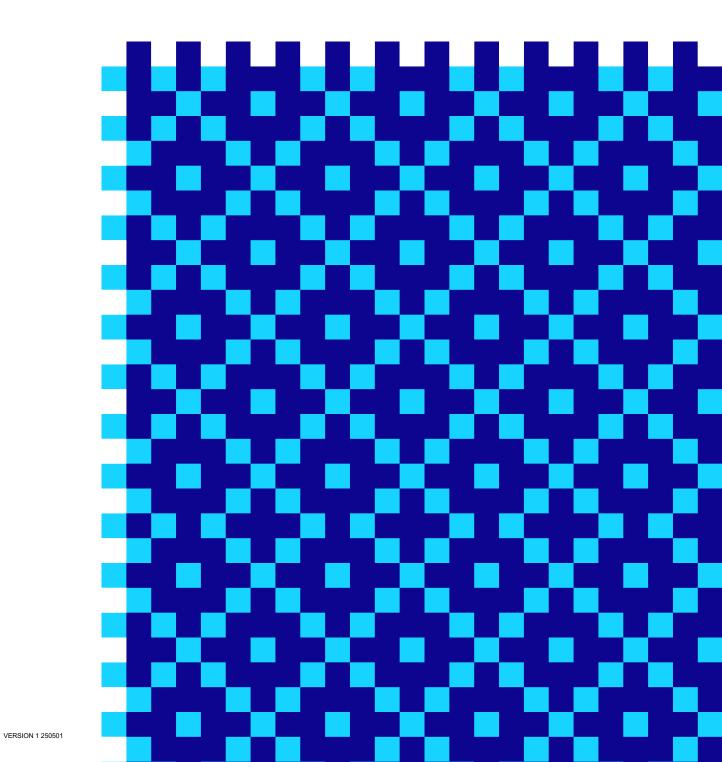


# **Card Processing Agreement**

Schedule 2 – Services



# Part A – The Processing Services

# 1. Prepay, Debit, Credit & Virtual Cards

#### Description:

THREDD provides the ability to create, manage and process transactions all types of cards including Prepay, Debit & Credit cards.

THREDD can support these cards as Physical or Virtual cards and enables the transition of a card from Virtual to Physical over its lifetime.

Chargeable Services

- Transaction and Card Account Based Fees
- Financial fee for settlement of POS or ATM transactions

#### 2. Programme Management

# Description:

THREDD provides the ability to define, manage and report on your estate of card products. THREDD provides the ability to setup up card programs with multiple different characteristics ensuring that a customer can create card programmes to meet their customer needs.

THREDD enables the setup of card programmes that can vary by (but not limited to) Scheme, BIN Sponsor/Issuing Bank, Card Manufacturer, BIN, Load Channels, Customer Fees, and other Card controls.

Chargeable Services

- Setup Fees
  - Minimum Transaction and Card Account Based
    Fees per month per Programme
  - Additional Set up Services BIN, Card Manufacturer & Load Channel
  - Jira Access
  - VPN Access
  - Project Dormancy Re-initiation
  - Dedicated Sessions

# 3. Chargeback Management

#### Description:

THREDD provides the ability for customers to raise Chargebacks to the Schemes either through Smart Client interface or via bulk chargeback files

Chargeable Services

Bulk Chargeback

# 4. Scheme & Regulatory Compliance

#### Description:

THREDD monitors changes and updates in the relevant Scheme, Security and Banking rules and regulations. It plans the necessary changes to its roadmap to ensure that both THREDD and its customers can maintain compliance.

#### **Chargeable Services**

• None

#### 5. Smart Client & Reporting

## Description:

Smart Client is a client application that enables customers to view and manage their cards, accounts and programmes. Smart client is a reporting and administration interface that enables customers to view and modify the following elements:

- Cards and Tokens
- Card details
- Card transactions
- Fees
- Balances and Adjustments
- Raising and managing chargebacks
- Agency Banking Accounts
- Mobile Tokenisation i.e. VDEP/MDES

# Chargeable Services

License Fees

### 6. Card Controls

#### Description:

By the definition of usage groups, THREDD provides the ability to control what transactions are enabled on a given collection of cards. The number and function of groups can be modified over the lifetime of the card and programme.

THREDD can support the following types of groups to determine the transaction behaviour of the card.

- Limit Group e.g. load and balance limits
- Authorisation Fee Groups
- Recurring/Scheduled Fee Group
- Web Service Fee Groups
- MCC Groups e.g. block or enable merchant categories
- Usage Groups e.g. block or enable ATM, eCom etc.
- Linkage Groups
- FX Groups
- Auth Calendar Groups e.g. block usage after 10pm
- Payment Token Usage Groups

Chargeable Services

None

# 7. Programme Management APIs

#### Description:

THREDD provides a rich set of web services that enables customers to report, control, modify and manage the cards, accounts, and their attributes. Calls to Web services enable customers to integrate their systems to perform actions to support the use cases of their customers. Examples include but are not limited to:

- Creating a Card
- Loading a Card
- Registering a Cardholder for 3DSecure
- Creating a Card with Agency Banking Features
- Using MFX Wallets

Usage of the web services may be subject to a fair usage policy

**Chargeable Services** 

# None

# 8. Realtime APIs

## Description:

THREDD provides Realtime API interfaces to enable its customers to inform its account holders and enable authorisation decisions for each transaction.

THREDD's Realtime API is called EHI (External host interface) which provides an extremely rich set of data per transaction. EHI provides 5 different integration modes to best enable your proposition.

Mode 3 is intended for customers where THREDD hold the account balance and the real-time information is intended to provide information. This information can be passed onto the cardholder (e.g. via push notifications) and/or for analysis purposes.

Modes 1,4 & 5 are intended for customers where they hold the account balance and the real-time information is intended to allow the customer to make decisions whether to authorise the transaction. In these modes THREDD expects a response within an allotted timeframe. Modes 4 & 5 differ from 1 in that they enable THREDD to authorise transactions if a response cannot be obtained from the customer for authorisation.

Mode 2 is the same as Mode 3 except that the customer can override the authorisation decision if they wish.

# Chargeable Services

• External Host Interface (EHI)

# 9. Wallet and Balance Management

# Description:

THREDD is able to manage and maintain the balance information on a card or account for its customers. As such, it can act as the system of record for the customer. Balances are adjusted based on authorisation of incoming card transactions or via webservice instructions from the customer e.g. Load and Balance adjustments.

For certain card types THREDD can provide multiple currency balances on one card. In this instance THREDD maintains the balance as transactions in those currencies takes place

# Chargeable Services

None

# 10. Card Bureau Integrations

#### Description:

THREDD is already integrated with a wide range of Card Bureaus and Manufacturers in multiple geographic regions. This enables you to work with the right partner for your proposition. Please contact the commercial teams at THREDD for the latest list of partners.

Chargeable Services

THREDD None

#### 11. Scheme Integrations

## Description:

THREDD is integrated and certified in multiple regions with both MasterCard and Visa. THREDD maintain dedicated connections to the schemes via scheme defined hardware solutions. This enables you to work with the right scheme partner for your proposition.

Chargeable Services

#### THREDD None

# 12. BIN Sponsor and Issuing Bank Integrations

#### Description:

THREDD is already integrated with a wide range of BIN sponsors and Issuing Banks in multiple geographic regions. This enables you to work with the right partner for your proposition. Please contact the commercial teams at THREDD for the latest list of partners.

Chargeable Services

THREDD None

# 13. Card and Transaction Management

# Description:

Client's can view and manage their cards and transactions through THREDD application interface that enables Clients to view and modify the following elements below. Access to this product is controlled using THREDD's own identity provider.

- View Card details, such as viewing live Card spend limits
- Manage Cards, such as PIN and CVC2 management and balance adjustments
- Payment tokens
- Cardholder details
- Card transactions
- Card fees

# Chargeable Services

- Management Fees
- Usage Fees

# Part B – The Additional Services

# 1. Protect and Fraud Tools

#### Description:

Protect is a transaction monitoring and anti-fraud tool that enables customers to define, measure and manage fraud rules that will stop potentially fraudulent transactions. Protect enables rules to be setup using a varied array of transaction parameters to ensure they are appropriate for all different types of propositions.

Protect enables customers to review transactions flagged by the rules to enable manual review and update of the rules.

Chargeable Services

Protect

#### 2. Mobile and Tokenisation solutions

#### Description:

THREDD supports the tokenisation solutions of Visa and Mastercard to enable cards to be used for mobile services such as Apple-pay, Google-pay and Samsung-pay as well as other emerging tokenisation solutions such as merchant tokenisation etc.

**Chargeable Services** 

- MDES
- VTS

# 3. IVR & SMS customer comms

#### Description:

THREDD can provide an automated IVR (Interactive Voice Response) solution for customers to support cardholders calling a phone number to access the following services:

- Balance enquiry
- Card activation
- PIN issuance
- Card blocking for Lost & Stolen service
- Divert to manned customer services

The solution can be set up in multiple languages

THREDD can provide international SMS messages for information and security services. SMS short codes can support inbound messages that support the following services:

- Balance enquiry
- Card activation
- Card blocking for Lost & Stolen service

**Chargeable Services** 

- IVR
- SMS

# 4. Secure

# Description:

3-D Secure is an industry defined protocol designed to be an additional security layer for online card transactions. Visa and Mastercard require compliance to this evolving standard to support card programs going to market.

THREDD provides a fully compliant 3D Secure solution including the latest 3DS 2.x standards to enable PSD2 compliance in Europe. THREDD has integrated with third party providers to provide this service.

#### Chargeable Services

3D secure for VISA or Mastercard

# 5. Mobile Wallet Push Provisioning

# Description:

Tokenised cards can be added to the Mobile wallets e.g. Apple-pay, Google-pay via the wallet application provided by each wallet provider. Push Provisioning enables customers to leverage the authentication used in their mobile application to support the pushing of the card directly to the wallet from the customer app.

THREDD has integrated the MeaWallet solution to provide a mobile SDK that can be integrated into the customer app that can retrieved the tokenised credentials from THREDD and then add to the mobile wallet.

#### Chargeable Services

Mobile Payments Service by MeaWallet

# 6. Agency Services

#### Description:

THREDD has worked with Modulr to enable customers to add a bank account along with the card account that THREDD provides. This Bank account can be GBP or Euro and supports Faster payments/BACS/CHAPS or SEPA CT respectively. Accounts are enabled with Account number and sort code and/or IBAN.

THREDD manages the balance for these accounts as normal and provides web service and EHI integration so they can be managed in a similar way to the card solution

Chargeable Services

Agency Services

# 7. Fraud Transaction Monitoring

#### Description:

THREDD's can provide Fraud Transaction Monitoring (baseline), which is a Client managed service. This tool includes:

- the Client's specific implementation of the Base Software;
- the ongoing provision of the Base Software and its outputs (i.e. assessment of authorisations for potential fraud risk).

#### Chargeable Services

Fraud Transaction Monitoring

# 8. Fraud Transaction Monitoring Service

## Description:

THREDD's can provide Fraud Transaction Monitoring Service, which is a THREDD managed service. This includes:

- Fraud Transaction Monitoring
- Sandbox Replay

Customer Fraud Alerts

#### **Chargeable Services**

• Fraud Transaction Monitoring Service

# 9. Enhanced Fraud Transaction Monitoring

#### Description:

THREDD's can provide Enhanced Fraud Transaction Monitoring, which is a Client managed service. This tool includes:

- the Client's specific implementation of the Base
   Software
- the ongoing provision of the Base Software and its outputs
- Adaptive behaviour profiling of authorisations for potential fraud risk
- Advanced analytics

#### Chargeable Services

• Enhanced Fraud Transaction Monitoring

# 10. Enhanced Fraud Transaction Monitoring Service

#### Description:

THREDD's can provide Enhanced Fraud Transaction Monitoring Service, which is a THREDD managed service. This includes:

- Enhanced Fraud Transaction Monitoring
- Sandbox Replay
- Customer Fraud Alerts

#### **Chargeable Services**

Enhanced Fraud Transaction Monitoring Service

# 11. Sandbox Replay

#### Description:

This is the feature which allows users to test the effects of changes made to analytics in the staging environment.

**Chargeable Services** 

Sandbox Replay

# 12. Customer Fraud Alert

Description:

Communications sent from THREDD to the most recent phone number or email address held on THREDD database for the relevant Cardholder.

# Chargeable Services

Customer Fraud Alert

# 13. Card Data API

#### Description:

Card data allows the user to receive full card details through the mobile application using encrypted REST APIs. This allows Thredd clients the ability to receive encrypted PAN data. Clients can then display the card information via their mobile application.

# Chargeable Services

Card Data API

# 14. In-App Digital Wallet Push Provisioning API

# Description:

THREDD provides an API that a client may use to request a digital wallet- specific card cryptogram. Once received, clients can forward the encrypted card data to the appropriate digital wallet provider for secure storage into the wallet. THREDD currently supports In-App Push Provisioning for Apple and Google digital wallets.

# Chargeable Services

In-App Digital Wallet Push Provisioning API

# 15. Scam Transaction Monitoring

#### Description:

THREDD can provide scam transaction monitoring service that includes risk scoring all inbound and outbound account-toaccount (A2A or non-card) payments using an out-of-the-box data science payments model designed to receive inbound and outbound payment flow data, to which model applies machine learning analytics to generate an output. The service also includes creating and managing rules to support payment decision-making.

#### Chargeable Services

Scam Transaction Monitoring

#### 16. Fraud Transaction Monitoring reseller

#### Description:

THREDD's can provide clients with the ability to configure and white-label subscribers and tenants for Fraud Transaction Monitoring (baseline), which is a Client managed service. This tool includes:

- the Client's specific implementation of the Base Software;
- the ongoing provision of the Base Software and its outputs (i.e. assessment of authorisations for potential fraud risk).

Chargeable Services

- Fraud Transaction Monitoring
- Sandbox Replay
  - Customer Fraud Alerts
  - Managed service

## 17. Fraud Transaction Monitoring reseller service

#### Description:

THREDD can provide clients with the ability to configure and white-label subscribers and tenants for Fraud Transaction Monitoring (baseline), which is a Thredd managed service. This tool includes:

 the Client's specific implementation of the Base Software;  the ongoing provision of the Base Software and its outputs (i.e. assessment of authorisations for potential fraud risk).

# **Chargeable Services**

• Fraud Transaction Monitoring reseller service

#### 18. Transaction Reconciliation

# Description:

THREDD offers this service to automatically reconcile transaction settlements, and flag unmatched transactions to the client. THREDD provides clients access to a web portal, which enables them to review their transaction reconciliations.

Chargeable services:

Transaction Reconciliation

# 19. Network Fees

#### Description:

THREDD offers this service to analyse network invoices that clients receive from Visa and Mastercard to provide insights to clients via a web portal. THREDD delivers the capability for clients to automatically upload network invoices to the platform.

Chargeable services:

Network Fees

# 20. Scheme Reporting

# Description:

THREDD offers this service to assist clients in completing Quarterly Mastercard Reports (QMR) and Visa Quarterly Operating Certificates (QOC). The service is delivered via a web portal. It can automatically populate reports with available THREDD data. Moreover, THREDD delivers the capability for clients to automatically upload specific non-THREDD data required to complete QMR and QOC reports.

Chargeable services:

• Scheme Reporting

# 21. Visa Alias Directory

## Description:

This service gives clients full indirect access to the Visa+ Aliasing (Visa Alias Directory) APIs without the need to integrate directly with Visa APIs. Instead, clients simply connect with the Thredd API. This service maps Visa tokens to PANs and vice versa. This service helps clients (including non-PCI compliant entities) as they target compliance with the Visa mandates to implement Visa ADS.

Chargeable services:

Visa Alias Directory

# 22. Click to Pay

#### Description:

THREDD provides an API that a client may use to request a cardholder and/or card are registered into the Mastercard or

Visa Click to Pay service. THREDD will register the cardholder and/or card at the appropriate card network.

Chargeable services: • Click to Pay